

REMARKS

INTRODUCTION:

In accordance with the foregoing, the Specification has been amended. Claims 1-7 are pending and under consideration.

OBJECTION TO THE SPECIFICATION

It is respectfully submitted that the present amendments to the specification overcome the objections.

OBJECTION TO CLAIM 1

It is respectfully noted that claim 1, line 4 was already amended to change "handling" to "handling" in the amendment filed September 27, 2004.

REJECTIONS UNDER 35 U.S.C. §102(b):

The Examiner continues to rely upon Bourne. As previously asserted, claim 1 recites that the operation program and/or the associated information specified by the item selected by the operator are displayed on the display screen, the operator confirming and editing the displayed operation program and/or associated information according to the displayed information.

The Examiner responds by relying upon column 11, lines 38-41 of Bourne. The portion of the reference quoted by the Examiner states "create a visual representation of setup operations to be performed on the bending apparatus so that a human operator can thereby perform the setup operations." However, this portion does not disclose editing operations, and instead only discloses the performing of operations.

The Examiner also relies upon column 15, line 60 to column 16, line 8. However, this portion discloses displaying a 3D representation of the part, and that the designer may modify the design by adding or removing details. This is an editing of the displayed 3D image, not the displayed operation program.

Similarly, the portions of column 57 relied upon by the Examiner refer to operations on the image. Specifically, column 57, lines 29-31 state "[t]he view function module 316 performs

functions such as zooming in/out, and panning during display of the part on a graphic interface."

The Examiner also relies upon column 55, line 50 to column 56, line 52. This portion discloses various commands such as "print" and "quit." However, these commands do not edit an operation program.

Finally, the Examiner relies upon column 22, lines 4-40. This portion discloses three types of planning, namely, generative planning with weak heuristics, generative planning with strong heuristics and variant planning with case based reasoning. Generative planning with weak heuristics includes an algorithm which determines the bend sequence according to a least total cost. No editing is disclosed, seemingly because the lowest cost drives the selection and is determined according to the algorithm.

According to variant planning with case based reasoning, a user edits an old plan to solve new problems by editing the RML program for a similar part. This old plan is selected according to an index which selects the design which is most similar to the current part. Thus, the selection is determined according to the index, thus, the operation program is not selected by an operator, as claimed.

According to generative planning with strong heuristics, a human inputs the design and several features of the new part, and the ordering of the bends is determined. However, no editing option is disclosed. In fact, the reference itself indicates that this method lacks flexibility, seemingly because the order cannot be edited.

As previously noted, independent claim 1 further recites "communicating means for uploading/downloading an operation program specified by one of the items displayed on the display screen selected by an operator and/or information associated with the operation program between the information processing device and said machine tool, said handling robot or said visual sensor." However, the Examiner did not address this argument in the present office action.

Furthermore, claim 1 recites display means for displaying a list of items specifying operation programs for said machine tool. Bourne discloses that a plan is developed for bending, and that the bending sequence is determined. Software is generated so that the bending workstation 10 can automatically perform the operations of the bending process. Bourne, col. 3, ln. 36-47. However, there is no disclosure as to how the bending sequence is determined. Thus, there is no mention of a list of items, as claimed.

Still further, claim 1 recites uploading/downloading an operation program specified by one of the items displayed on the display screen selected by an operator. However, Bourne

generally relates to selection of hardware, not the operation program. Specifically, column 3, lines 38-40 of the reference state that "[n]eeded hardware must be selected." Furthermore, column 6, lines 62-64 also state that a process planner selects the necessary hardware.

Finally, independent claim 1 recites the handling robot or visual sensor to be used for different kinds of workpieces on a display screen. However, although Bourne refers to different types of hardware (dies, punch tools, grippers, etc.) and different types of bending operations, there is no disclosure of different types of workpieces. Bourne, col. 3, ln. 36-47.

Accordingly, withdrawal of the rejection is requested.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

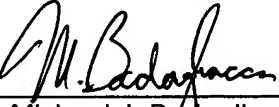
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 9-7-05

By: 
Michael J. Badagliacca
Registration No. 39,099

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501